

All the earlier claims numbered from 1 to 29 are cancelled and the new claims numbered 30 – 58 are added:

I claim:

30. (new) A multifunction data port apparatus with multiple interfaces connected between a digital services network, including the Internet and an intranet, and a utility user's household, said data port comprising:

- a) a utility meter interface configured to communicate with a meter for measuring the utility usage in said household of a utility delivered to said household and
- b) a network interface configured to communicate with said digital service network and
- c) a household interface configured to communicate with household devices of said utility user and
- d) a computer disposed within said data port configured to store and process data and other communications from said interfaces.

31. (new) A multifunction data port apparatus as recited in claim 30 comprising the means wherein

- a) said network interface is adapted to process data exchanged at broadband rates with the Internet and digital communication networks and
- b) said computer is programmed to process said data at broad band rates and function as an Internet router.

32. (new) A multifunction data port apparatus as cited in claim 30, wherein said computer comprises a router that is adapted to communicate with a multiplicity of said digital service networks and with said interfaces located within said utility user's household and to store and process said communications.

33. (new) A multifunction data port apparatus as cited in claim 30, comprising a scrambler scramble and descramble said communications and data transmitted between said digital service providers and said utility user's household.

All the earlier claims 1 to 29 are cancelled and new claims 30 – 58 are added:

I claim:

30. (new) A multifunction data port apparatus with multiple interfaces connected between a digital services network, including the Internet and an intranet, and a utility user's household, said data port comprising:

- a) a utility meter interface configured to communicate with a meter for measuring the utility usage in said household of a utility delivered to said household and
- b) a network interface configured to communicate with said digital service network and
- c) a household interface configured to communicate with household devices of said utility user and
- d) a computer disposed within said data port configured to store and process data and other communications from said interfaces.

31. (new) A multifunction data port apparatus as recited in claim 30 comprising the means wherein

a) said network interface is adapted to process data exchanged at broadband rates with the Internet and digital communication networks and

b) said computer is programmed to process said data at broad band rates and function as an Internet router.

32. (new) A multifunction data port apparatus as cited in claim 30, wherein said computer comprises a router that is adapted to communicate with a multiplicity of said digital service networks and with said interfaces located within said utility user's household and to store and process said communications.

33. (new) A multifunction data port apparatus as cited in claim 30, comprising a scrambler scramble and descramble said communications and data transmitted between said digital service providers and said utility user's household.

34. (new) A multifunction data port apparatus as cited in claim 30, comprising a video processor configured to process, store and retrieve video data and signals, including modulating and demodulating said video signals and configured to convert analog video signals into digital video signals and digital video signals into analog video signals.

35. (new) A multifunction data port apparatus as cited in claim 30, comprising a voice processor configured to process, store and retrieve voice data and telephone communication; said voice processor providing means for transmitting and receiving voice, fax and data information from within said utility user's household and means for transmitting and receiving voice, fax and data information from external service providers and means for using transmission media selected from the group consisting of cellular and wireless transmission, telephone lines, power lines, fiber optic lines and coaxial video cable and means for transmitting and receiving voice, fax and data information using voice over Internet protocol.

36. (new) A multifunction data port apparatus as cited in claim 30, wherein said connection to said digital service network and to said digital service providers is by means of at least one transmission media selected from the group consisting of fiber optic cable, coaxial cable, twisted pair cable, electric power lines, telephone lines and wireless transmission media.

37) (new) A multifunction data port apparatus as cited in claim 30, wherein said computer further comprises a data storage device configured to store information and communication received from said interfaces and a battery to provide backup power in cases of power outage.

38) (new) A multifunction data port apparatus as cited in claim 30, wherein said computer is programmed to detect a power outage and to retrieve stored digitized voice messages from said data storage device and to communicate said retrieved message to said utility user when said computer detects a power outage.

39) (new) A multifunction data port apparatus as cited in claim 30, further comprising means to identify the location of said multifunction dataport and wherein said computer is programmed to detect a power outage and to communicate with said utility company the geophysical location of said power outage through said digital services network.

40) (new) A multifunction data port apparatus as cited in claim 30, wherein said computer is programmed to modify the thermostat settings in the utility user's household as a function of changes in the cost or availability of electric power in response to communications from the electric utility or the utility user.

41) (new) A multifunction data port apparatus as cited in claim 30 further comprising a sealed housing with attendant electronics being configured to detect any tampering of the seal for said sealed housing and means to detect any physical intrusion within said data port apparatus or said sealed housing and means to program said computer to transmit said evidence of tampering to said utility provider.

42) (new) A multifunction data port apparatus with multiple interfaces connected between said digital services network, including the Internet and said intranet, and a utility user's household, said data port comprising:

- a) a utility meter interface configured to communicate with a meter for measuring the utility usage in said household of a utility delivered to said household and
- b) a network interface configured to communicate with digital service providers and
- c) a household interface configured to communicate with household devices of said utility user and

- d) a computer disposed within said data port configured to store and process data and other communications from said interfaces and
  - e) said data port is located in a sealed housing with attendant means to detect any tampering of said sealed housing; and
  - f) said computer comprises a router configured to communicate with a multiplicity of digital service providers and with said interfaces located within said utility user's household and
  - g) said computer includes a scrambler to encrypt and decrypt communications between the utility user and said digital service network.
- 43) (new) A multifunction data port apparatus as cited in claim 42 with attendant electronics configured to use a global position system to identify the physical location of said multifunction dataport.
- 44) (new) A multifunction data port apparatus as cited in claim 42, wherein said computer further comprises a data storage device configured to store information and communication received from said interfaces and a battery to provide backup power in cases of power outage.
- 45) (new) A method of conducting transactions optimized by a secure computing environment by means of said multifunction data port apparatus as recited in claim 42, wherein said computer is further configured to: receive an authorization for an Internet financial transaction capable of using a credit and debit card number for the utility user's household together with the name of an Internet vendor; and wherein said data port is further configured for
- a. encrypting a data port number
  - b. encrypting said card number of said utility user, prior to transmission of encrypted card number to said vendor or creditor, with an encryption key known by the financial institution which issued said credit or debit card

- c. transmitting said encrypted card number and the amount of the purchase for financial authorization to a financial institution which issued said credit or debit card
- d. receiving from said financial institution, verification that a purchase amount reported by said vendor is matched to the amount transmitted by said data port by
- e. authorizing payment only when the two purchase amounts agree and said key decrypts the number from said vendor into a valid number wherein said vendor never has possession of a valid credit or debit card number whereby said encryption key is changed for each transaction.

46) (new) A multifunction data port apparatus of claim 43 further configured to insure that said dataport is physically located in said utility user's household by means of the physical location provided by either a global positioning system via satellite, or via ground-based radio frequency triangularization methods, or both.

47) (new) A method of conducting a secure purchase or other secure transaction by means of using the multifunction dataport of claim 45 configured as a secure terminal accessing the Internet or other digital service network and further configured to

a) provide that the authorized party sending said message to said secure data port asking it to transmit to said authorized party the current timing signals from said global positing system and

b) to provide that authorized party is using said timing signals to verify the location of said secure data port, and

c) said timing signals and location providing said authorized party with key to decrypt message.

48) (new) A method for conducting secure computing and transmission of data using the multifunction dataport in a sealed location of claim 45 by further means of

a) utility user transmitting and receiving data within said utility user's household from said sealed multifunction dataport and

b) said secure dataport transmitting said secure message over a digital service network only if said seal is intact and it does not detect evidence of tampering.

49) (new) A method using the multifunction dataport apparatus of claim 41 to control a switch located in the utility meter of said utility customer to remotely turn electric power on and off by means of

a) electric utility installing utility meter with switch to control power in utility user's electric meter box and

b) said utility sending commands to said multifunction dataport to transmit through said meter interface to said utility meter the signal to switch on and off the electric power

50) (new) The method to communicate financial and other transactions including voting and census registration by the use of said secure dataport and the means of the steps stated in claim 45.

51) (new) The method of using the multifunction dataport of claim 34 to receive from digital service networks video communication, games and multimedia.

52) (new) The method of using the multifunction dataport of claim 35 to receive and transmit telecommunication data including voice over Internet protocol, cellular and local telephone services, video, and video on demand by said utility user.

53) (new) The multifunction dataport apparatus of claim 42 where said sealed housing provides the seal and means for attachment for the connection of the electric meter to the meter box.

54) (new) The multifunction dataport apparatus of claim 42 where said sealed housing is physically attached to the electric meter box

55) (new) The method to use the multifunction dataport apparatus of claim 30 as a secure terminal by locating it on power poles in the vicinity of the power distribution lines.

56) (new) A method to further configure and use the multifunction dataport apparatus of claim 45 as a secure terminal whereby

- a) said data port is further configured to have a serial number known to and registered with financial and other secure institutions at the request of said utility user and
- b) said serial number is itself encrypted and is contemplated to generate the key to encrypt and decrypt data transmission by said dataport.

57) (new) A method to use the multifunction dataport of claim 32 to sub-meter electric power and provide computer services and access to the Internet and other digital networks by the means of

- a) said dataport being used as a master data port to the sub-metered data ports attached to the utility meter and housing of each of the said sub-metered data ports and
- b) providing electrical and other utility services to each utility user in residential and commercial structures where said utility services include cellular and other telecommunication services, Internet access, cable TV, video games and other access to digital networks through said sub-metered data ports.

58) (new) A method according to claim 58 wherein the said multifunction data port and sub-metered data ports are connected and employed to receive transmissions that monitor the



movements of users restricted to their homes or other quarters by legal action or other circumstances including medical disabilities.

Charles E Roor  
July 10, 2006